UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/590,509	06/12/2007	Carsten Gunther	47279-5004	1021

55694 7590 12/03/2009

DRINKER BIDDLE & REATH (DC)
1500 K STREET, N.W.
SUITE 1100
WASHINGTON, DC 20005-1209

EXAMINER	
FRIDIE JR, WILLMON	
ART UNIT	**PAPER NUMBER**
3724	

MAIL DATE	DELIVERY MODE
12/03/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/590,509	GUNTHER ET AL.	
	Examiner	Art Unit	
	WILL FRIDIE JR	3724	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *06 August 2009*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1 and 3-27* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,3-6,8,10,and 12-20* is/are rejected.

7)☒ Claim(s) *7,9,11 and 21-27* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1,3-6,8,10,and 12-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Flynn (6435780). Flynn (6435780) discloses a tool for cutting materials comprising a rotatable body with a rotation axis and cutting edges for cutting the material during movement of the body in a first direction parallel to the rotation axis; the cutting edges (20, 22, 24) comprise inner cutting edges (30, 32, 34) laying on a first surface of revolution which is in the first direction higher at a larger diameter and lower at a smaller diameter. Also an outer edge forming a cutting tooth (18) is disclosed. Flynn (6435780) discloses the claimed invention except for a cone angle larger than 65°.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide a cone angle larger than 65°, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. In re Boesch, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

In regard to claim 6 it would have been an obvious matter of design choice to use the claimed dimensions since such a modification would have involved a mere change in the size of a component. A change in size is generally recognized as being within the level of ordinary skill in the art. In re Rose, 105 USPQ 237 (CCPA 1955). It appears that there would be no new or unexpected result from such a modification.

In regard to claims 14 and 16, it would have been obvious to one having ordinary skill in the art at the time the invention was made to locate the elements in the claimed manner since it has been held that rearranging parts of an invention involves only routine skill in the art. In re Japikse, 86 USPQ 70. It appears that there would be no new or unexpected result from such a modification.

With respect to claim 15, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use the claimed number of elements since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. St. Regis Paper Co. v. Bemis Co., 193 USPQ 8. It appears that there would be no new or unexpected result from such a modification.

With respect to claims 18 and 19, to perform the method as claimed would have been obvious to one of ordinary skill in the art, in view of the teachings of Flynn (6435780), since all the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed and use them in an off the shelf method known to those in the industry with no change in their respective functions, such that the claimed method steps would perform their known functions and the combination of steps would have yielded nothing more than predictable results to one of ordinary skill in the art at the time of the invention.

Allowable Subject Matter

Claims 7,9,11 and 21-27 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

Applicant's arguments filed 8/6/09 have been fully considered but they are not persuasive.

Applicant argues that the tool of Flynn functions in a completely different way from that claimed in the present application and is used in a completely different way from that claimed in the present application; therefore, the prima-facie case of obviousness is without merit and should be withdrawn.

The examiner submits that in response to Applicant's argument and his reliance on the specification with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. *Ex parte Masham*, 2 USPQ 1647 (1987). Further, applicant broadly claims a "tool" in all of his claims.

Applicants further argue that Flynn does not disclose at least the features of "the cutting edges comprise inner cutting edges laying on a first surface of revolution which is in the first direction higher at a larger diameter and lower at a smaller diameter", and "at a diameter larger than the inner cutting edges outer cutting edges are laying on a second surface of revolution which is in the first direction lower at a larger diameter and higher at a smaller diameter"

The examiner submits that it is clear from figures 1 and 3 that the cutting edges (20, 22, and 24) and (30, 32, 34) satisfy these limitations. Further applicant does not clearly define the structure and orientation of the cutting edges. Are they formed in separate sections? Are they continuous? Are they sloping from the highest point to the lowest?

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to WILL FRIDIE JR whose telephone number is (571)272-4476. The examiner can normally be reached on Monday - Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, ASHLEY BOYER can be reached on 571 272 4502. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

wf
/Willmon Fridie/
Primary Examiner, Art Unit 3724